## Docket No. N2021-1

## Library Reference SH-LR-N2021-1-1

## Data Sets for Maps Illustrating Changes in Service Standards

Related to the Testimony of Steve Hutkins (SH-RT-1)

## PREFACE

Purpose: SH-LR-N2021-1-1 contains the calculations and data sets used to prepare the maps and chart in the associated testimony. This Category 2 library reference is associated with the testimony of, and sponsored by, rebuttal witness Hutkins (SH-RT-1).

Predecessor Document: None

Content: Library Reference SH-LR-N2021-1-1 consists of one Excel workbook, "Data Sets for Maps Illustrating Changes in Service Standards," which is derived from two library references filed by the Postal Service: USPS-LR-N2021-1-1, tab "1\_P.Mode\_Mapping\_Public.xlsx," and USPS-LR-N2021-1-3, tab "3\_Zip3\_OD\_Pairs.xlsx."

The library reference has 12 tabs:

<u>Fig 2 SCF 606</u>: This tab contains the data set used to make the map in "Figure 2. Origin SCF Chicago IL 606 Proposed Service Standards." The three columns on the far right of the sheet (cols. H-J) can be copied and pasted to Google Drive to replicate the map using the randymajors.org website.

<u>Fig 3 SCF 200</u>: This tab contains the data set used to make the map in "Figure 3. Origin SCF Washington DC 200 Proposed Service Standards." The three columns on the far right of the sheet (cols. H-J) can be copied and pasted to Google Drive to replicate the map using the randymajors.org website.

<u>Fig 4 SCF 981</u>: This tab contains the data set used to make the map in "Figure 4. Origin SCF Seattle WA 981 Proposed Service Standards." The three columns on the far right of the sheet (cols. H-J) can be copied and pasted to Google Drive to replicate the map using the randymajors.org website.

<u>Fig 5 SCF 900</u>: This tab contains the data set used to make the map in "Figure 5. Origin SCF Los Angeles 900, CA Proposed Service Standards." The three columns on the far right of the sheet (cols. H-J) can be copied and pasted to Google Drive to replicate the map using the randymajors.org website.

Fig 6 % Pairs SSD 4 or 5: This tab contains the data set used to make the map in "Figure 6. Percent of Pairs Shifting to 4 or 5 day Service Standard." It calculates the percent of origin-destination pairs that would shift to a 4- or 5-day service standard under the proposal. This is done by adding up the number of 4-day and 5-day pairs in each SCF, originating and destinating (each pair is counted twice), then dividing by the total number of pairs in the SCF (counted twice) to determine the percentage of total pairs that are 4- or 5-day; the percentages are then assigned to a range for mapping purposes. These ranges were determined by dividing the 903 SCFs into four groups of roughly equal size while trying to make the dividing points as simple as possible. The three columns on the far right of the sheet (cols. O-Q) can be copied and pasted to Google Drive to replicate the map using the randymajors.org website.

Fig 7 % Pairs SSD 5. This tab contains the data set used to make the map in "Figure 7. Percent of Pairs Shifting to 5-day Standard." It calculates the percent of origin-destination pairs that would shift to a 5-day service standard under the proposal using the same method as for Figure 6. The three columns on the far right of the sheet (cols. O-Q) can be copied and pasted to Google Drive to replicate the map using the randymajors.org website.

Fig 8 % vol SSD 4 or 5: This tab contains the data set used to make the map in "Figure 8. Percent of Destination Volume per SCF shifting to SSD 4 or 5-day." It calculates the percent of volume shifting to 4- or 5-day service standard by adding up the total (destinating) volume for the pairs with a 4-day and 5-day standard, then dividing the total by the total volume for the SCF. The resulting percentages are then assigned to a range for mapping purposes. The three columns on the far right of the sheet (cols. H-J) can be copied and pasted to Google Drive to replicate the map using the randymajors.org website.

Fig 9 % vol SSD & 1-digit: This tab contains the data set used to make the map in "Figure 9. Percent of Volumes by Service Standard and 1-digit zip zones." It calculates the percent of volumes by service standard and 1-digit zip zones by adding up the originating and destinating volumes for each service standard for all the SCFs within a 1-digit-prefix zone, and then calculating the percentages of total volume per service standard for each zone.

Fig 10 ADT Current: This tab contains the data set used to make the map in "Figure 10 Average Delivery Time (days) under Current Service Standards." It calculates the average delivery times for each SCF as follows: For each OD pair, multiply the daily destinating volume times the number of days for the pair's service standard, then do the same for the originating volume; add up the numbers for each SCF and divide by the sum of the volumes (originating and destinating). (This tab does not show the first step; it begins with sums for volume and volume x SSD for each SCF.) The three columns on the far right of the sheet (cols. J-L) can be copied and pasted to Google Drive to replicate the map using the randymajors.org website.

<u>Fig 11 ADT Proposed</u>: This tab contains the data set used to make the map in "Figure 11. Average Delivery Time (days) under Proposed Service Standards." It uses the same method as the calculations for Figure 10. The three columns on the far right of the sheet (cols. J-L) can be copied and pasted to Google Drive to replicate the map using the randymajors.org website.

Fig 12 ADT % Increase: T This tab contains the data set used to make the map in "Figure 12. Percent Increase in Average Delivery Time." It calculates the percent increase in average delivery time for each SCF by comparing the calculations for average delivery time in Figures 8 and 9 to show how much average delivery time will increase for each destinating SCF, then grouping the SCFs by percentage range for mapping purposes. The three columns on the far right of the sheet (cols. H-J) can be copied and pasted to Google Drive to replicate the map using the randymajors.org website.

Fig 13 % Air Mode: This tab contains the data set used to make the map in "Figure 13. Percent of OD pairs using air (current)." It starts with USPS-LR-N2021-1-1, tab "1\_P.Mode\_Mapping\_Public.xlsx," adds up the origin-destination pairs currently approved for air transportation for each SCF, calculates the percent of total pairs for each SCF, and then divides percentages into four groups for mapping. The three columns on the far right of the sheet (cols. H-J) can be copied and pasted to Google Drive to replicate the map using the randymajors.org website.